PCC and the transition to Linked Data - implementation during LD4P3

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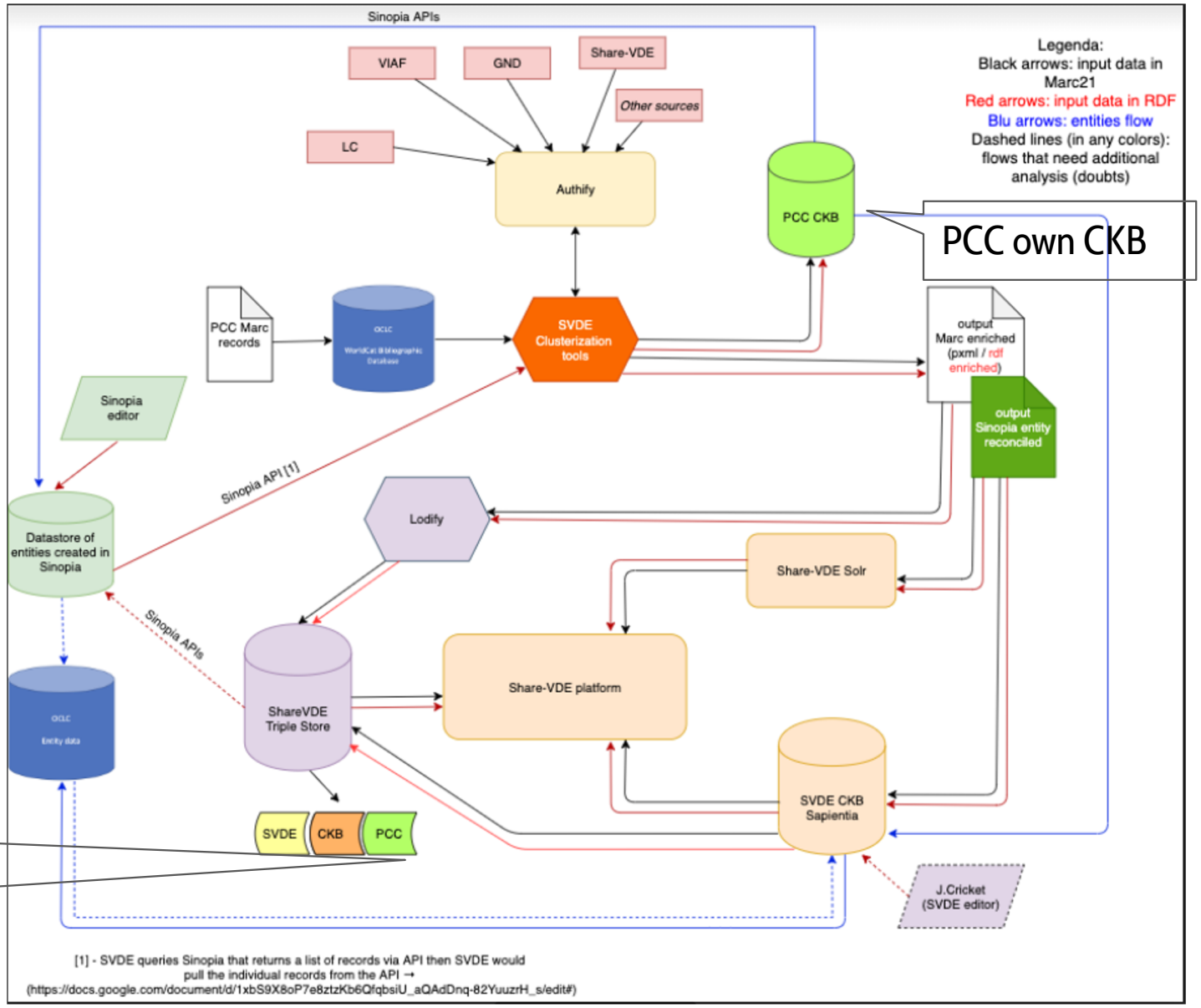
PCC data pool progress update

- Initial load from OCLC to SVDE by 31st December 2020 → approx. 4.5 million WorldCat MARC bibliographic records created by PCC libraries (042 ##$apcc)
- SVDE has delivered PCC records converted in BIBFRAME along with the original MARC records enriched with URIs
- converted records delivered to OCLC through ad hoc pipeline; also available here PCC along with MARC records enriched
- regular updates are ongoing, on monthly basis, for the duration of LD4P3
  to follow, PCC entities will be available in the CKB
- PCC data on SVDE portal and/or on PCC dedicated skin in preparation

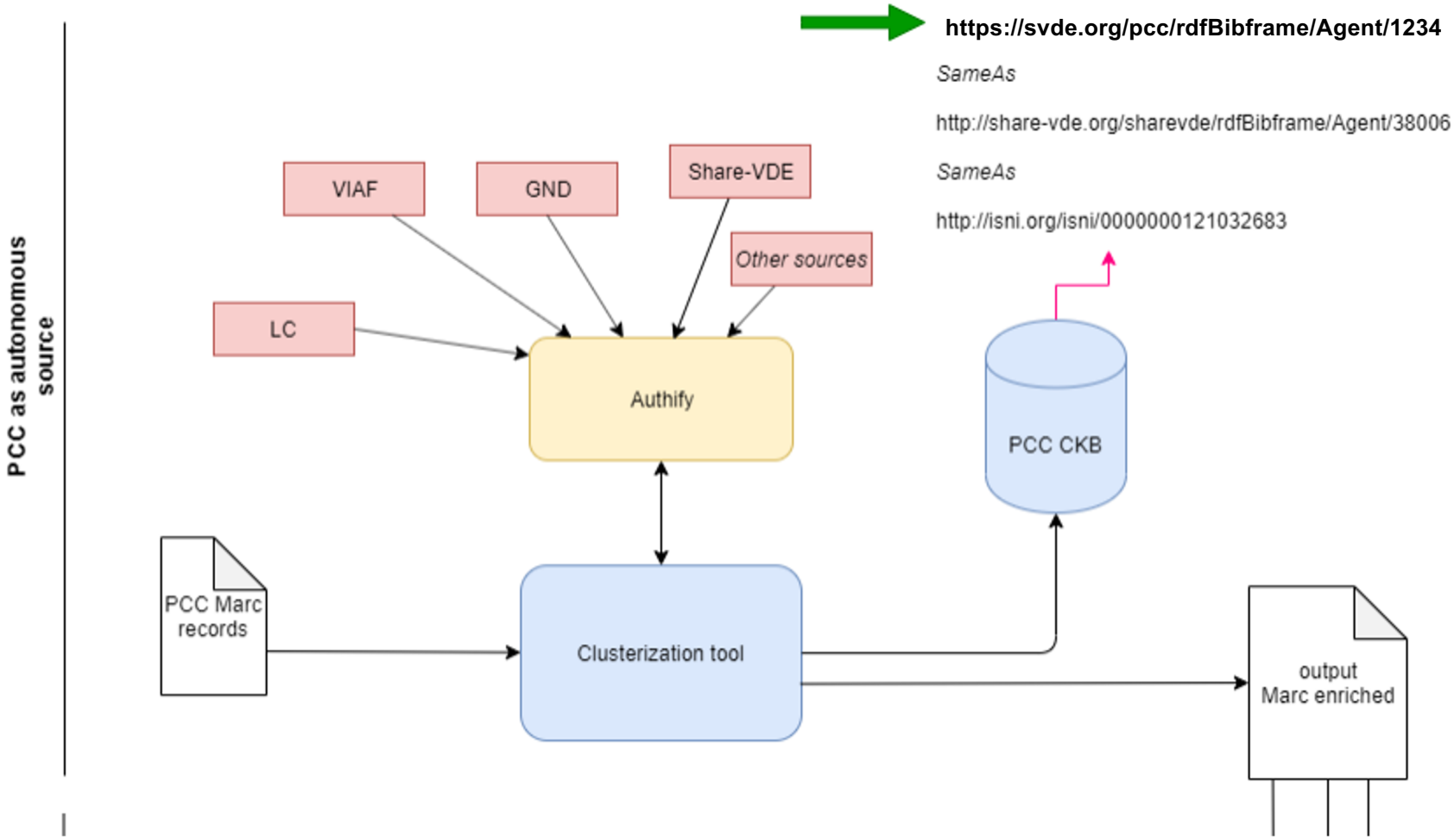
PCC data pool in Share-VDE

Conversion, enrichment, reconciliation and housing of PCC data into the Share initiative as autonomous tenant with a separated enriched CKB and local PCC URIs



PCC autonomous tenant

Inclusion of PCC data into Share-VDE as tenant: first step



Workflow PCC - SVDE

1. The PCC can be considered as a new tenant to be included in the Share Family;
2. the PCC MARC data feed the clusterization tool Authify;
3. enrichment of the PCC MARC data through Authify;
    - URI enrichment from various data sources: LC, GND, VIAF, OCLC, Wikidata, Share-VDE;
    - SVDE is an external data source serving URI enrichment for PCC;
4. result:
    - “ad hoc” PCC Cluster Knowledge Base including SVDE, LC, GND, VIAF, OCLC, Wikidata URIs (and URIs from other sources);
    - the PCC MARC data are data enriched;

Workflow PCC - SVDE

5. the PCC MARC data enriched feeds
    - the Cluster Knowledge Base;
    - SVDE platform (through SOLR);
    - Lodify conversion tool (conversion from MARC to linked data);

6. PCC data has a specific URI to identify the entities of PCC graph, e.g.
   https://svde.org/pcc/rdfBibframe/Agent/1234
   SameAs
   http://share-vde.org/sharevde/rdfBibframe/Agent/38006
   SameAs
   http://isni.org/isni/0000000121032683

7. PCC data is enriched with Share-VDE URIs (and other sources);

8. Preconditions are set for PCC's data publication on the SVDE entity based discovery interface.

Benefits of having PCC data in SVDE

Transition to linked open data:

PCC data converted in RDF (both new data and old records)

original MARC records enriched with URIs

Persistent identification and authoritativeness:

enrichment of PCC data with IDs from authoritative sources (SVDE, ISNI, VIAF etc.)

ad hoc namespace for PCC URIs → this makes the PCC itself an authoritative source

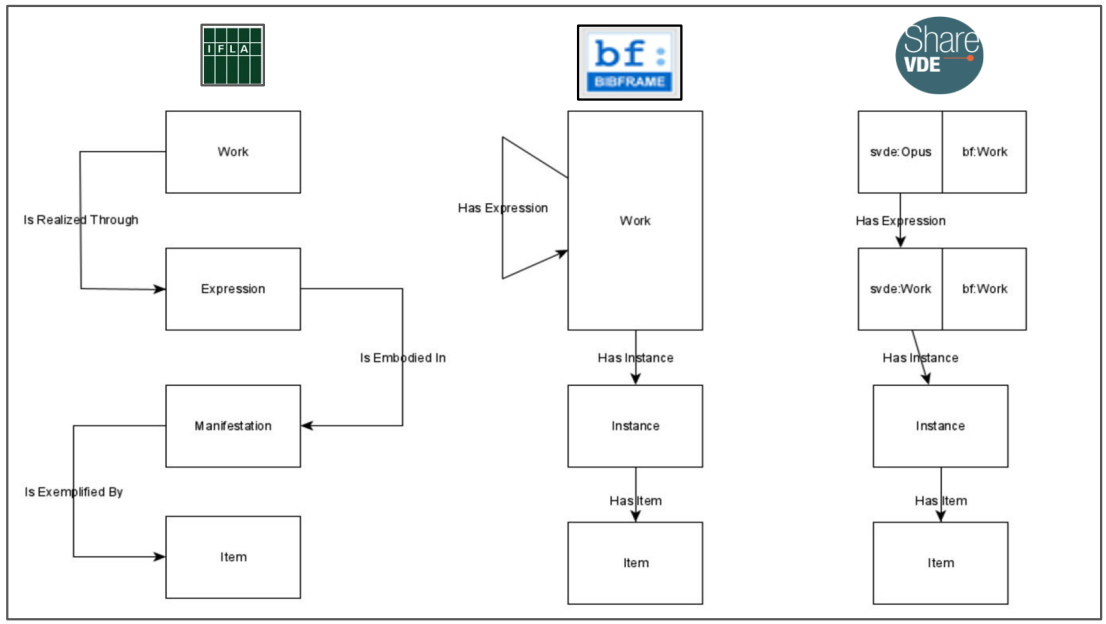
enhanced outreach of the PCC and prominent role in the international community

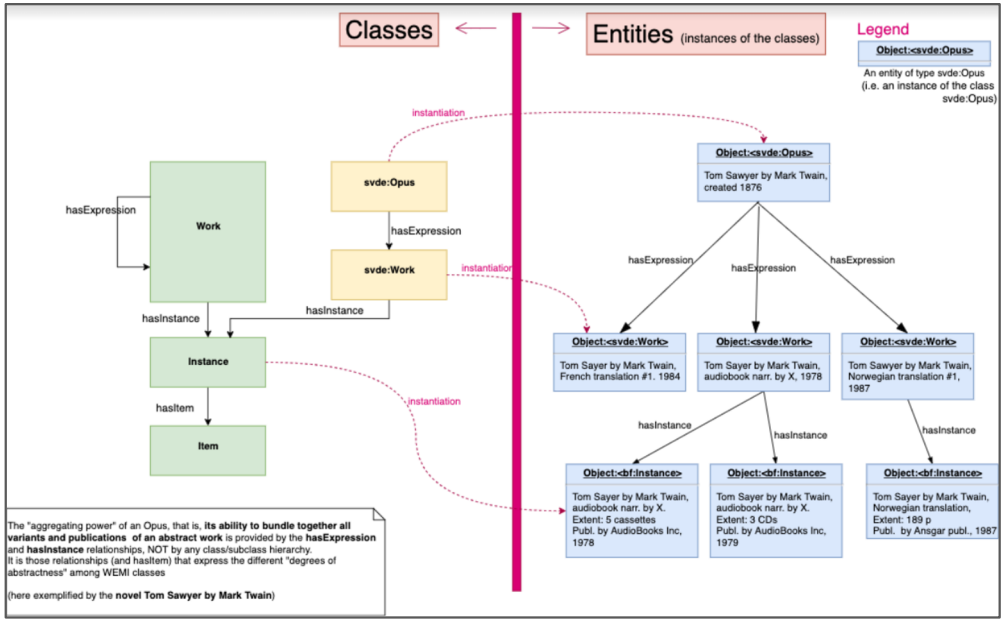
Exchange of information:

easier integration of PCC data in external environments through the PCC URIs

PCC data are treated according to the SVDE entity model that enables interoperability

Facilitate interoperability between entity models



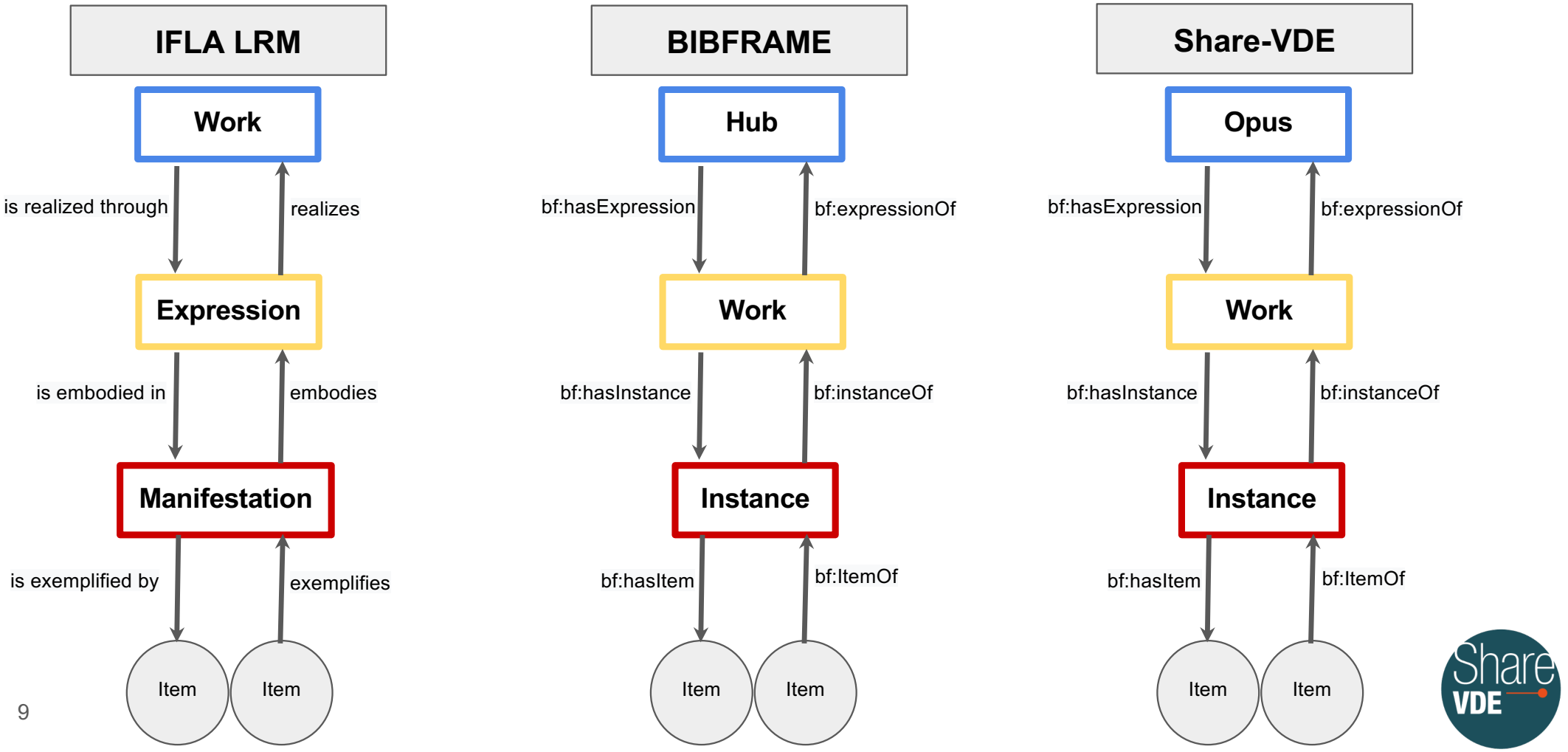


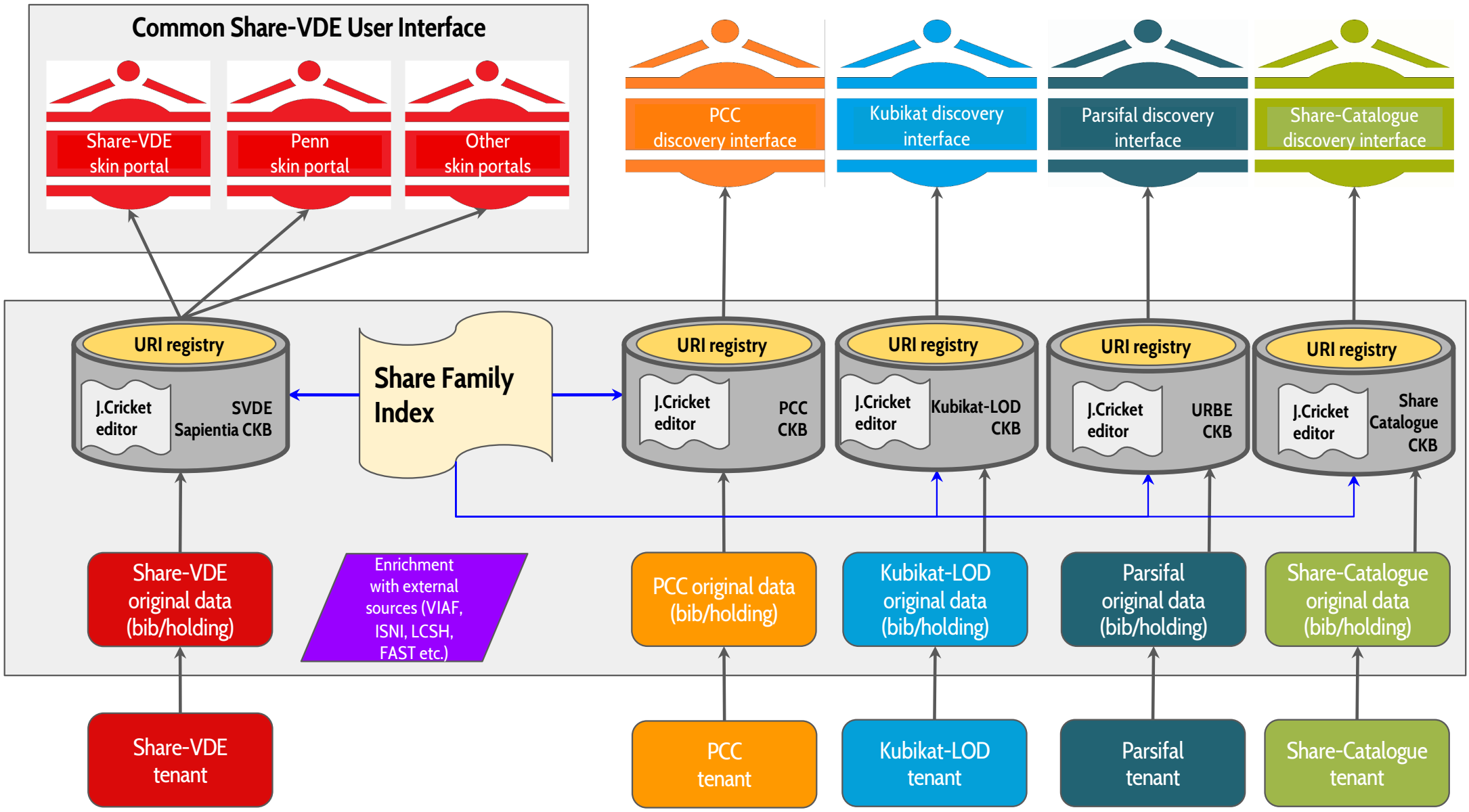
SVDE Advisory Council decision of June 10th 2020:

Resource that is a svde:Opus is also a bf:Work -- Likewise resource that is a svde:Work is also a bf:Work

See the SVDE entity model compared to BF and LRM and an example of application of the model

Comparison IFLA LRM/BIBFRAME/Share-VDE

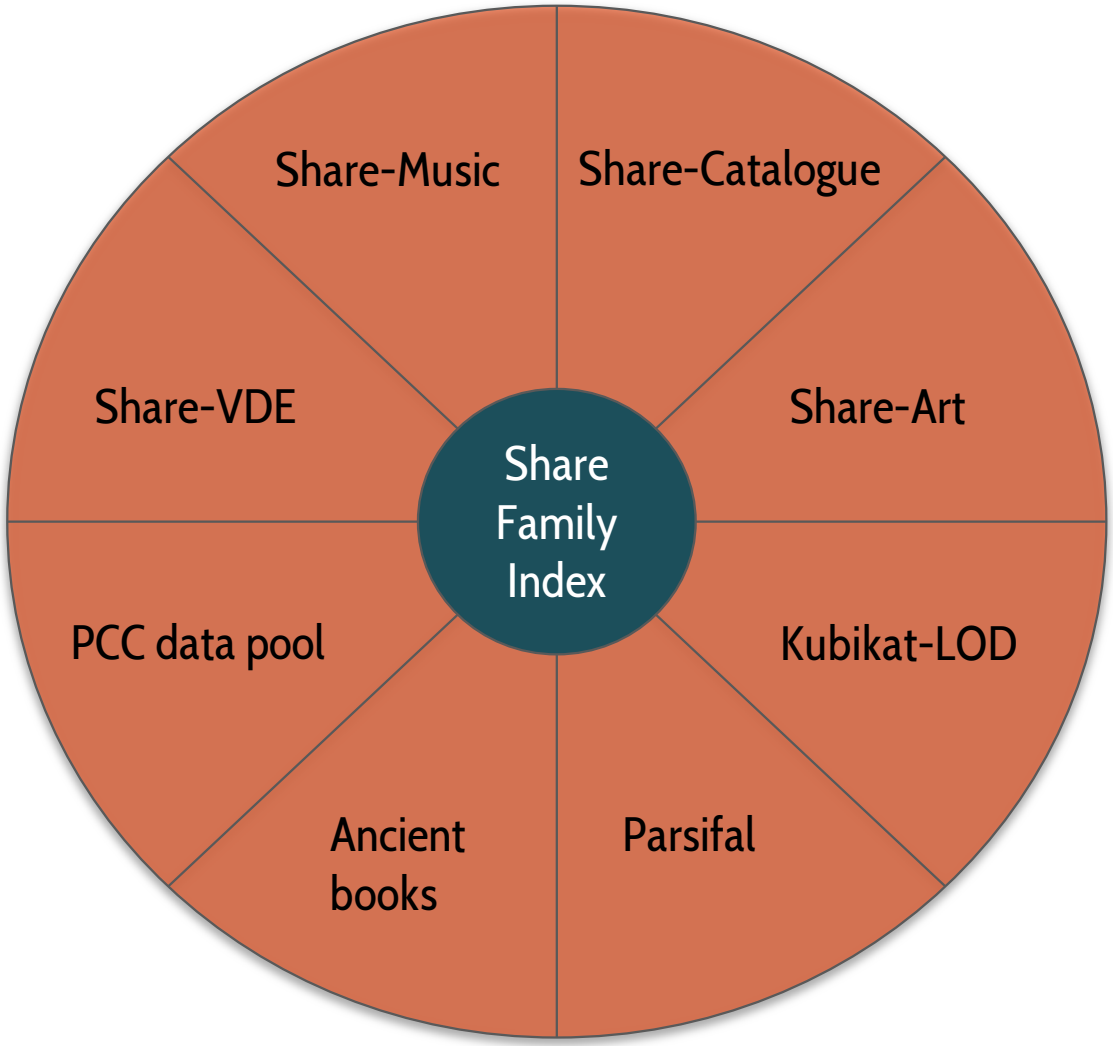



Common Share-VDE User Interface
Share-VDE skin portal
Penn skin portal
Other skin portals
PCC discovery interface
Kubikat discovery interface
Parsifal discovery interface
Share-Catalogue discovery interface
URI registry
J.Cricket editor
SVDE Sapientia CKB
Share Family Index
URI registry
J.Cricket editor
PCC CKB
URI registry
J.Cricket editor
Kubikat-LOD CKB
URI registry
J.Cricket editor
URBE CKB
URI registry
J.Cricket editor
Share Catalogue CKB
Share-VDE original data (bib/holding)
Enrichment with external sources (VIAF, ISNI, LCSH, FAST etc.)
PCC original data (bib/holding)
Kubikat-LOD original data (bib/holding)
Parsifal original data (bib/holding)
Share-Catalogue original data (bib/holding)
Share-VDE tenant
PCC tenant
Kubikat-LOD tenant
Parsifal tenant
Share-Catalogue tenant

Approach to tenant infrastructure

- Each tenant has its own CKB (e.g. Share-VDE CKB, PCC CKB, Kubikat-LOD CKB etc.)
- Each entity has its own URI in the different CKB namespaces
  - E.g. Antonio Vivaldi URIs in different CKB namespaces [the following URIs are for simulation purposes]
    http://share-vde/agent/123456 sameAs
    https://svde.org/pcc/agent/7890123 sameAs
    http://kubikat/agent/456789 sameAs
- Central index able to point to all the URIs in all the CKBs of the different tenants: SFI - Share Family Index
  - sameAs relationships between URIs of entities in the various CKBs
  - the SFI ID (Share Family Index ID) can be the unique identifier aggregating URIs specific to each CKB, carrying the minimum amount of data needed to identify the object
- Having a "central ID" like the SFI ID that aggregates URIs for the same resource from different CKBs could facilitate a range of additional services across the projects of the various tenants
- Benefit of the SFI: maintain identity of individual project, but also cooperate and exchange with others

Participation and autonomy in the Share Family

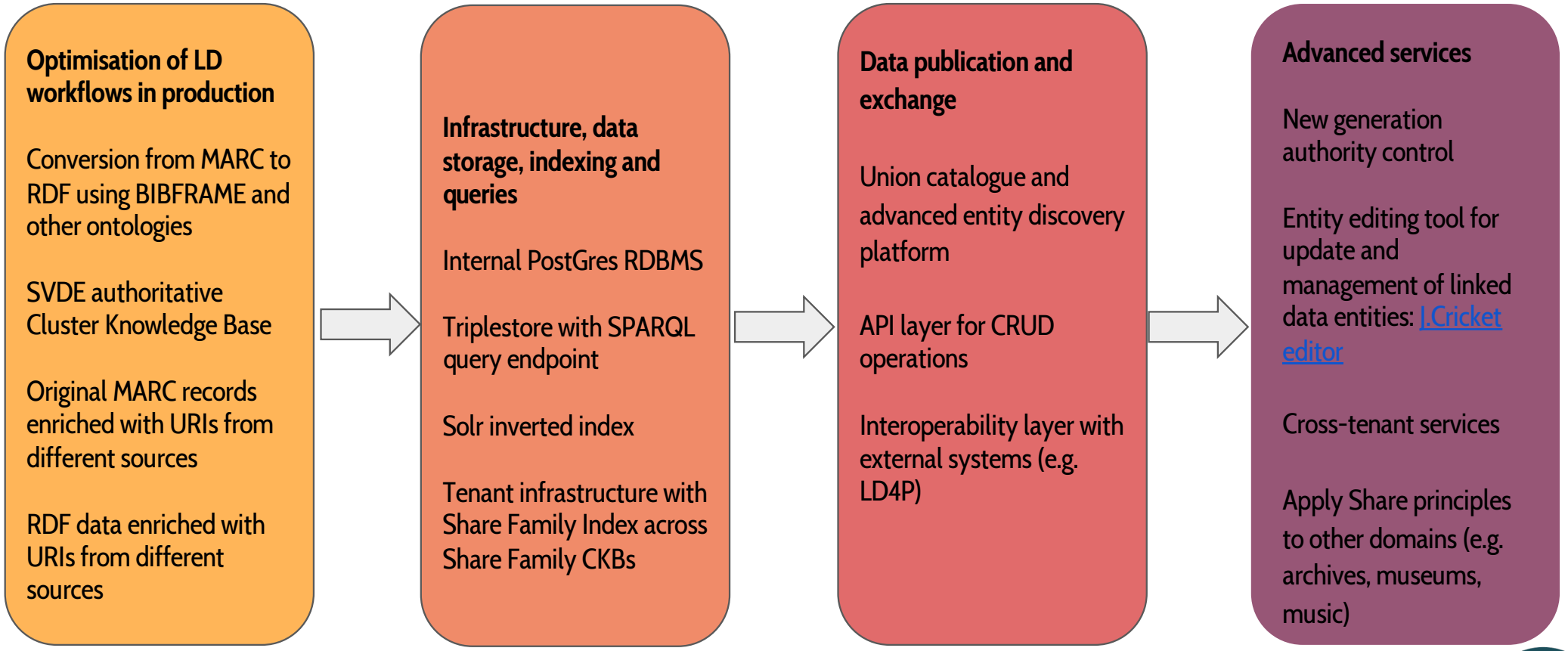


Community engagement: World Wide Web

Mixed community: cross-domain cooperation across the Web community

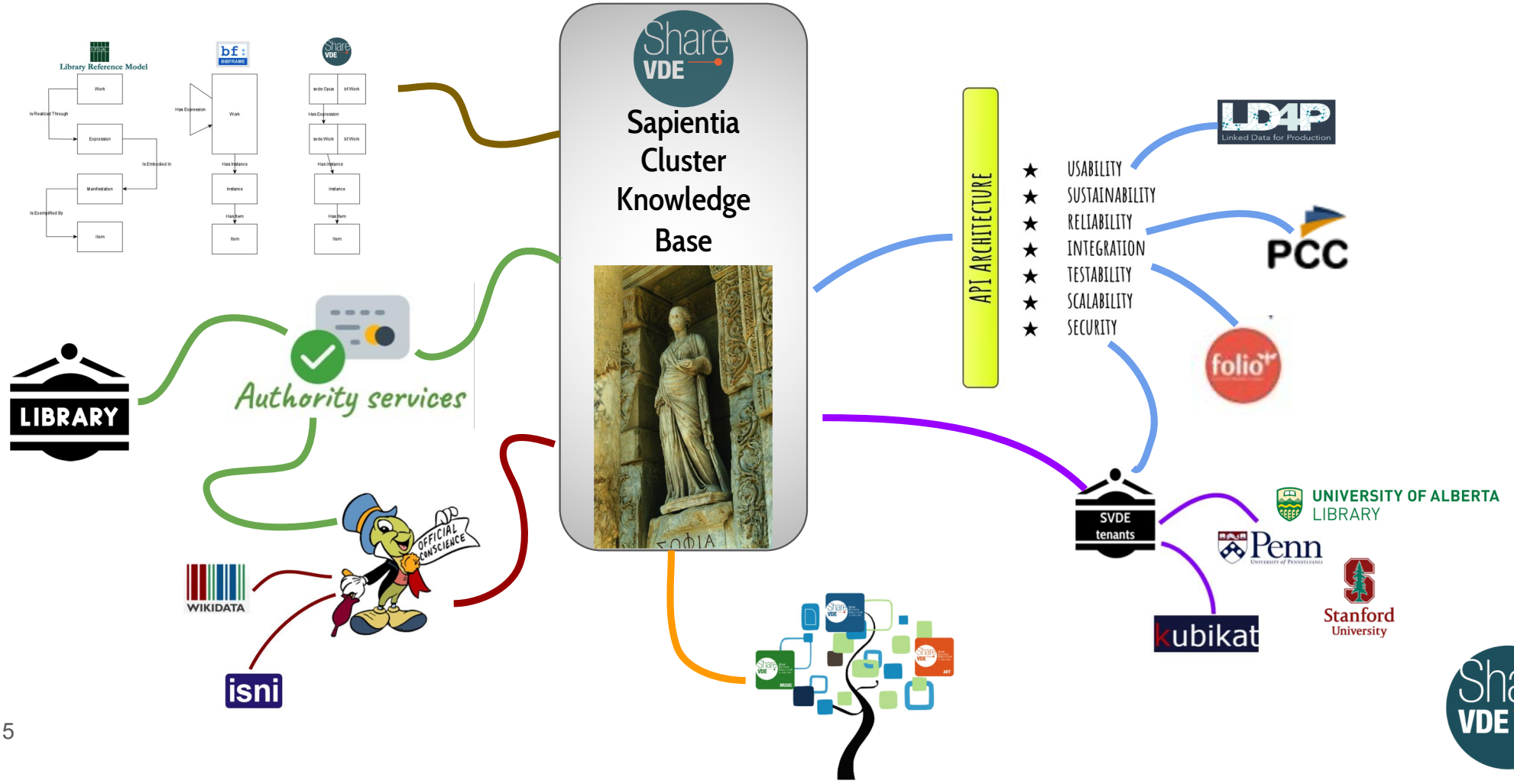
Scientific value: same solutions serve scopes of different communities, data reuse

The evolution over time: towards SVDE 2.0



More on the latest achievements

SVDE Sapientia CKB ecosystem



Authority services: automatic processes

For record environments:

→ MARC record validator

→ MARC corrections for errors and obsolete forms

→ MARC matching/enrichment with SVDE and external profiled sources

→ reporting of MARC records elaboration

→ creation/update and delivery of Authority records to the library

For RDF environments:

→ Access point enrichment (including Series and Subjects)

→ Matching, import and interaction with the Sapientia Cluster Knowledge Base (Enabled through the LOD Platform)

Authority services: manual processes

→ Manual control for similar matches and for non matches
→ Entity Work and Agents (including Publisher) access point management
→ Integration with the ISNI registration processes

(Enabled through the URI Registration Platform)

→ Cluster Knowledge Base entity management for Works and Agents

(Enabled through the J. Cricket CKB Editor)

LD4P3 - SVDE closing the loop

- first step done → API pipeline that pulls records from Sinopia to SVDE
  - implemented by Sinopia team and tested by SVDE
- now working on interoperability of the data
  - important: see how closely the PCC Data Pool RDF matches the RDF in Sinopia
  - SVDE entity model compatibility: svde:Opus and svde:Work are both a type of bf:Work
- exchanges ongoing: technical meetings are in course
  - demo of the current SVDE back-end search API has been done, and specs shared to give Sinopia/QA updates about what data will be available for queries and how
  - fine tune data exchange: the evolution of SVDE CKB 2.0 data structure has been shared, work in progress to define steps needed to close the loop

Thank you

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